



Trench Systems

The trench is the most common of the soil treatment systems in Minnesota. A trench is defined as a soil treatment and dispersal system, the absorption width of which is 36 inches or less. Trenches are narrower than they are wide, no wider than three feet, and are laid out along the contours of the soil. The method of distributing the septic tank effluent can be either pressure or gravity.

There are a number of different configurations by which the trenches can be connected with each other and with the septic tank. A typical layout for a trench system is shown in [Figure 12.7](#) in the [SSTS Manual for Septic System Professionals in Minnesota](#).

The trench soil treatment system consists of distribution media, the bottom of which must not be deeper than 48 inches, covered with a minimum of 12 inches of soil and a close-growing and vigorous vegetation. Many trench systems utilize a pipe and gravel distribution system where effluent passes through the pipe and is stored within the media until it can be absorbed into the soil. Other distribution media are allowed including chambers and expanded polystyrene to distribute the effluent to the soil.



Rock and pipe filled trench at a demonstration site



Chamber trench system